

CLAIMS

1. Nucleotide sequence corresponding to a gene comprising:

- 5 (a) a sequence according to one of the SEQ IDs 1 to 15 or an equivalent gene which comprises:
(b) a sequence which hybridizes with one of the sequences according to (a),
(c) a sequence which has at least 80% homology with (a) or
10 (b), or (d) a sequence characterized in that the cellular expression of the gene is induced or inhibited during apoptosis and/or tumor suppression.

2. Sequence according to claim 1, characterized in that apoptosis and/or tumor suppression is(are) induced by
15 p53 and/or p21.

3. Sequence according to ~~either of claims 1 and 2,~~ characterized in that it is chosen from TSAP 9 to TSAP 22 or an equivalent gene.

4. Sequence according to claim 3, characterized in that apoptosis and/or tumor suppression is(are) induced by
20 p53 and/or p21.

5. Sequence according to claim 1, characterized in that it corresponds to the TSIP 3 gene or an equivalent gene.

25 6. Sequence according to claim 5, characterized in that the cellular expression of the gene is inhibited during apoptosis and/or tumor suppression.

7. Sequence according to ~~one of claims 1 to 6,~~ characterized in that the cellular expression of the gene
30 is activated by one at least of the transfectants chosen from the group comprising the p21 transfectants, the TSAP3 transfectants and the antisense TSIP2 transfectants.

8. Vector for cellular expression of a sequence according to ~~one of claims 1 to 7.~~

35 9. Expression vector according to claim 8,

characterized in that it is a viral vector.

10. Vector according to claim 9, characterized in that it is an adenovirus, a retrovirus, a herpesvirus or a poxvirus.

5 11. Vector according to claim 8, characterized in that it is a naked nucleic acid vector.

12. Vector according to ~~one of claims 8 to 11,~~ ⁸ ~~characterized in that it comprises a sequence which ensures the tissue-specific targeting and/or expression.~~

10 13. Cell transformed with an expression vector according to ~~one of claims 8 to 12.~~

14. Protein which can be obtained by culturing a transformed cell according to claim 13, and which is encoded by the sequence according to ~~one of claims 1 to 7.~~

15 15. As a medicine, ~~a vector according to one of claims 8 to 12 or a protein according to claim 14.~~

16. As a medicine, a compound which ensures the cellular expression of at least one of the nucleotide sequences according to ~~one of claims 1 to 3~~ or of their products.

20 17. As a medicine according to claim 15, a nucleotide vector which ensures the cellular expression of said sequence.

25 18. As a medicine, a compound which ensures the inhibition of the cellular expression of at least one cellular gene according to ~~one of claims 1, 5 to 7~~ or of their products.

30 19. As a medicine according to claim 18, an activated nucleotide which ensures the blocking of the nucleotide sequence.

20. As a medicine according to claim 18, a monoclonal antibody directed against the protein(s) encoded by the nucleotide sequence.

35 21. As a medicine intended for the treatment of cancer, a medicine according to ~~one of claims 15 to 20.~~

a
22. As an antiviral agent, a medicine according to
~~one of claims 15 to 20.~~

a
a
5 23. As a diagnostic agent, in particular for
determining the predisposition to and monitoring cancers,
all or part of the sequences according to ~~one of claims 1~~
~~to 7~~ to be used as a nucleotide probe or as an
amplification primer.

a
10 24. As a diagnostic agent, in particular for
determining the predisposition to and monitoring cancers,
an antigen corresponding to all or part of the proteins
encoded by the sequence according to ~~one of claims 1 to 7,~~
or the corresponding antibodies.

15 25. Model for revealing an anticancer and/or
antiviral medicine, containing the cells according to
claim 13.

added
B1

TO 5000 "CH 22 2000